Brian Schweitzer, Governor

P.O. Box 200901

Helena, MT 59620-0901

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PRELIMINARY DETERMINATION ON PERMIT APPLICATION

Date of Mailing: March 16, 2009

Name of Applicant: Conner's Concrete Incorporated

Source: Portable Rock Crushing and Screening Operation

<u>Proposed Action</u>: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 4362-00.

Proposed Conditions: See attached.

<u>Public Comment</u>: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by April 15, 2009. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

<u>Departmental Action</u>: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

<u>Procedures for Appeal</u>: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh

Air Permitting Program Supervisor Air Resources Management Bureau

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(406) 444-3490

Ed Warner

Environmental Engineer

Air Resources Management Bureau

(406) 444-2467

VW:EW Enclosures

MONTANA AIR QUALITY PERMIT

Issued To: Conner's Concrete Incorporated Permit: #4362-00

P.O. Box 801 Application Complete: February 4, 2009

Big Timber, MT 59011 Preliminary Determination Issued: March 16, 2009

Department's Decision Issued:

Permit Final: AFS #: 777-4362

An air quality permit, with conditions, is hereby granted to Conner's Concrete Incorporated (Conner) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Permitted Equipment

Conner operates a portable rock crushing and screening operation. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Conner operates a portable rock crushing and screening facility, which will initially be located in the SW ¼ of Section 7, Township 1 North, Range 15 East, in Sweet Grass County, Montana. However, Montana Air Quality Permit (MAQP) #4362-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

- 1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS)-affected crusher shall not exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 2. All visible emissions from any other NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).

- 5. Conner shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- Conner shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
- 7. Crushing production is limited to 2,119,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 8. Screening production is limited to 2,119,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Conner shall not operate more than two diesel engines/generators with a combined maximum rated design capacity not to exceed 1,000 horsepower (hp) (ARM 17.8.749).
- 10. The combined hours of operation of the diesel engines/generators shall not exceed 5,000 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Conner, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 12. Conner shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 13. Conner shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).

- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. Conner shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 3. Conner shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
- 4. Conner shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Conner as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 5. Conner shall document, by month, the crushing production from the facility. By the 25th day of each month, Conner shall calculate the crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Conner shall document, by month, the screening production from the facility. By the 25th day of each month, Conner shall calculate the screening production from the

facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

- 7. Conner shall document, by month, the hours of operation of the diesel engines/generators. By the 25th day of each month, Conner shall calculate the hours of operation for each of the diesel engines/generators for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 8. Conner shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

- 1. Within 30 days of commencement of construction of any NSPS-affected equipment, Conner shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
- 2. Within 15 days of the actual start-up date of any NSPS-affected equipment, Conner shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
- 3. Within 15 days of the actual start-up date of any non-NSPS-affected equipment, Conner shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection Conner shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as continuous emission monitoring systems (CEMS) or continuous emission rate monitoring systems (CERMS), observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Conner fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Conner of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)

- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Conner may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Conner shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Permit Analysis Conner's Concrete Incorporated Permit #4362-00

I. Introduction/Process Description

Conner's Concrete Incorporated (Conner) owns and operates a portable rock crushing and screening plant. The operation will originally be assembled within an existing gravel pit located in the SW¹/₄ of Section 7, Township 1 North, Range 15 East, in Sweet Grass County, Montana.

A. Permitted Equipment

Conner owns and operates a portable rock crusher with a maximum design capacity of up to 250 ton per hour (TPH); a portable sorting screen deck with up to three screen decks (combined maximum capacity of 200 TPH); a cone crusher with a maximum design capacity of up to 200 TPH; up to two diesel engines/generators with a combined maximum rated design capacity of up to 1,000 horsepower (hp); and associated conveyors and equipment.

B. Source Description

Conner proposes to operate this crushing and screening plant, using the equipment described above, to crush rock into specific sized gravel for use in various construction activities. For a typical operational setup, unprocessed material is loaded into a vibrating feeder via a front end loader and hopper which directly transfers the material to the jaw crusher. Crushed product material is conveyed from the jaw crusher to the screen deck for sorting. The material is routed from the sorting screens to finished material conveyors or the cone crusher for further size reduction. Material that passes through the cone crusher is conveyed back to the screen deck for resorting in a closed loop system. Material routed to the finished material conveyors are deposited onto finished material stock piles. In all the plant process includes up to 12 transfer points.

The sorting screen and cone crusher are the production rate limiting equipment at the plant. They are arranged in series after the jaw crusher and have a maximum design throughput of 200 TPH. The plant design average throughput is estimated to be 120 TPH. The permittee will utilize a portable electrical generator powered by a diesel engine to supply electricity to the plant. The maximum combined plant throughput is expected to be 250 TPH.

Conner plans to operate a wash plant periodically at the site. The wash plant will have power provided by a stationary diesel engine generator rated at 230 hp. In order to keep the permit de minimis-friendly, this permit authorizes the simultaneous use of up to two diesel engines/generators and limits the combined engine capacity to 1,000 hp or less.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Conner shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Conner must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

- 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Conner shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
- 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
- 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
- 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Conner is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Conner, the portable crushing equipment to be used under Montana Air Quality Permit (MAQP) #4362-00 is subject to this subpart because the jaw crusher, sorting screen, and cone crusher were manufactured or reconstructed after August 31, 1983. Other NSPS-affected equipment that may be located at the Conner facility would include any combination of the following: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station, which were constructed, reconstructed, or modified after August 31, 1983.
 - c. <u>40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence</u>

construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2005, and is not a fire pump engine. In order to keep the permit de minimis-friendly, this permit authorizes the simultaneous use of up to two diesel engines/generators and limits the combined engine capacity to 1,000 hp or less. The permit application states that the facility will be powered primarily by a Volvo 748 hp diesel engine/generator that was manufactured in 1999; therefore, this CI ICE will not be subject to this Subpart. Discussions with Conner have suggested that the 230 hp diesel engine/generator located at the facility was manufactured prior to April 1, 2005 and therefore not subject to this Subpart. This Subpart will be applicable to any CI ICE currently in use or added at a future date that is manufactured after April 1, 2005.

- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u>
 <u>Categories</u>. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants (HAP) for Stationary Reciprocating Internal Combustion Engines (RICE) establishes national emission limitations and operating limitations for HAP emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The Conner facility is currently not a major or area source of HAP; therefore, this Subpart does not apply. However, this Subpart will be applicable to any qualifying RICE if any future modifications to the Conner facility result in it becoming a major or area source of HAP.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Conner submitted the appropriate permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year (TPY) of any pollutant. Conner has a PTE greater than 15 TPY of oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes.</u> This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Conner submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Conner submitted an affidavit of publication of public notice for the January 29, 2009 issue of the *Big Timber Pioneer*, a newspaper of general circulation in the Town of Big Timber in Sweet Grass County, as proof of compliance with the public notice requirements.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 - 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 - 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 - 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Conner of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source
 <u>Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through
 ARM 17.8.827 shall apply to any major stationary source and any major modification
 with respect to each pollutant subject to regulation under the FCAA that it would emit,
 except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 TPY of any pollutant;
 - b. PTE > 10 TPY of any one HAP, PTE > 25 TPY of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 TPY of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.
 - ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4362-00 for Conner, the following conclusions were made.
 - a. The facility's PTE is less than 100 TPY for any pollutant. Conner agreed to federally enforceable limitations on the allowable annual hours of operation of their diesel engine generators which will prevent them from exceeding the PTE threshold of 100 TPY of any pollutant.
 - b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR 60, Subpart OOO, and potentially subject to Subpart IIII).
 - e. This facility is potentially subject to area source provisions of a current NESHAP standard (40 CFR 63, Subpart ZZZZ).
 - f. This source is not a Title IV affected source or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that this facility will be a minor source with respect to Title V because Conner agreed to accept federally enforceable limitations to keep them below the Title V Operating Permit Program thresholds. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

- i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
- ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. Conner shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A. Area Source Fugitive Emissions and Crushing/Screening Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing/screening operation. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. Conner may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Conner shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Also, Conner shall not cause or authorize to be discharged into the atmosphere from any affected screens, conveyor transfers, or other NSPS-affected equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Conner shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

Conner must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Conner is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Conner may also use chemical dust suppression, in order to maintain compliance with emission limitations in Section II.A of Permit #4362-00. The Department determined that using water spray bars, water, and chemical dust

suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operation.

B. Diesel Generator

Due to the limited amount of emissions produced by the diesel engine generators and the lack of readily available cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel engine generators.

In addition, any new diesel engine would be required to comply with the federal engine emission limitations including either EPA Tier 2 emission standards for non-road engines (40 CFR Part 1039) or New Source Performance Standard emission limitations for stationary engines (40 CFR 60, Subpart IIII).

The control options required for the proposed crushing/screening facility are comparable to other recently permitted similar sources, and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

CONTROLLED	TPY					
Emission Source	PM	PM_{10}	NO_x	CO	VOC	SO_x
Diesel Engines/Generators (up to 1000						
hp combined)	5.50	5.50	77.50	16.70	6.29	5.13
250 TPH Jaw Crusher	1.31	0.59			1	
200 TPH Cone Crusher	1.05	0.47				
Cold Aggregate Screens	11.83	2.43			1	
Cold Aggregate Storage Piles	1.80	0.85			1	
Cold Aggregate Handling/Conveyors	1.84	0.60			-	
Total Emissions	23.34	10.45	77.50	16.70	6.29	5.13

NOTES:

Annual hours of operation of the diesel generators are restricted to limit the potential annual NOx emissions to a level below the Title V threshold of 100 TPY.

PM₁₀PM with an aerodynamic diameter of 10 microns or less

VOC Volatile Organic Compounds

SOx Oxides of Sulfur

Diesel Engine Generators

Engine size: up to 1,000 hp (combined)

Hours of Operation: 5,000 hr/yr (restricted hours)

*PM*₁₀ *Emissions*:

Emission Factor: 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)

Calculations: (5,000 hours) * (1,000 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 5.50 ton/yr

*PM Emissions (PM is assumed to equal PM*₁₀ *for diesel engines):*

Emission Factor: 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)

Calculations: (5,000 hours) * (1,000 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 5.50 ton/yr

NO_x Emissions:

Emission Factor: 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)

Calculation: (5,000 hours) * (1,000 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 77.50 ton/yr

CO Emissions:

Emission Factor: 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)

Calculation: (5,000 hours) * (1,000 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 16.70 ton/yr

VOC Emissions:

Emission Factor: 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96) Calculation: (5,000 hours) * (1,000 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) =**6.29 ton/yr**

SO_x Emissions:

Emission Factor: 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)

Calculation: (5,000 hours) * (1,000 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) =**5.13 ton/yr**

Jaw Crusher

Maximum Process Rate: 250 TPH Hours of Operation: 8790 hr/yr

PM Emissions (controlled):

Emission Factor: 0.0012 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) =**1.31 ton/yr**

 PM_{10} Emissions (controlled):

Emission Factor: 0.00054 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =**0.59 ton/yr**

Cone Crusher

Maximum Process Rate: 200 TPH Hours of Operation: 8790 hr/yr

PM Emissions (controlled):

Emission Factor: 0.0012 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.05 ton/yr

 PM_{10} Emissions (controlled):

Emission Factor: 0.00054 lb/ton (crushing, AP 42, Table 11.19.2-2, 8/04)

Calculation: (200 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =**0.47 ton/yr**

Sorting Screen(s)

Maximum Process Rate: 200 TPH Hours of Operation: 8790 hr/yr Number of Screens: up to 3

PM Emissions (controlled):

Emission Factor: 0.0036 lb/ton (0.0022 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0036 lb/ton) * (ton/2000 lb) * (3 screen(s)) = 11.83 ton/yr

*PM*₁₀ *Emissions* (controlled):

Emission Factor: 0.00074 lb/ton (0.00074 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00074 lb/ton) * (ton/2000 lb) * (3 screen(s)) = 2.43 ton/yr

Storage Piles

Maximum Process Rate: 250 TPH Hours of Operation: 8790 hr/yr

PM Emissions (controlled):

Emission Factor: $k * (0.0032) * (U/5)^1.3 * (M/2)^1.4 = 0.00330$ lb/ton

Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)

U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)

 $M = material\ moisture\ content = 2.5\%\ (\text{Average from values provided in AP 42, Sec. } 13.2.4.3, 11/06)$

Control Efficiency: 50% (Water or chemical spray)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00330 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) =**1.80 ton/yr**

 PM_{10} Emissions (controlled):

Emission Factor: $k * (0.0032) * (U/5)^1.3 * (M/2)^1.4 = 0.00156$ lb/ton

Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)

 $U=mean\ wind\ speed=8.2\ mph\ ({\rm Average\ from\ values\ provided\ in\ AP\ 42, Sec.\ 13.2.4.3,\ 11/06})$

 $M = material\ moisture\ content = 2.5\%$ (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)

Control Efficiency: 50% (Water or chemical spray)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00156 lb/ton) * (ton/2000 lb) * (1 piles) * (1 - 50/100) =**0.85 ton/yr**

Conveyor Transfers

Maximum Process Rate: 250 TPH

Maximum Hours of Operation: 8760 hr/yr

Number of Transfers: 12

PM Emissions:

Emission Factor: 0.00014 lb/ton (0.00014 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (12 transfer) = 1.84 ton/yr

*PM*₁₀ *Emissions:*

Emission Factor: 0.000046 lb/ton (0.000046 controlled, AP 42, Table 11.19.2-2, 8/04)

Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (12 transfer) =**0.60 \text{ ton/yr}**

V. Air Quality Impacts

This permit is for a portable crushing/screening plant to be located at various locations around Montana. Permit #4362-00 contains operation conditions and limitations that would protect air quality for the site and surrounding area. Because this facility is a portable source that would operate on an intermittent and temporary basis, any effects to air quality will be minor. Further, the Department believes that the amount of controlled emissions generated by this project will not exceed any ambient air quality standard.

VI. Ambient Air Impact Analysis

The Department determined, based on ambient air modeling, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting
		private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private
		property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others,
		disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and
		legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the
		property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic
		impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the
		property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the
		physical taking of adjacent property or property across a public way from the property in
		question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in
		response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b,
		7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division Air Resources Management Bureau P.O. Box 200901, Helena, MT 59620 (406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Conner's Concrete Incorporated

P.O. Box 801

Big Timber, MT 59011

Air Quality Permit number: #4362-00

Preliminary Determination Issued: March 16, 2009

Department Decision Issued:

Permit Final:

- 1. *Legal Description of Site*: The initial site location is in the SW¹/₄ of Section 7, Township 1 North, Range 15 East, in Sweet Grass County, Montana.
- 2. Description of Project: Conner proposes to construct and operate a portable rock crushing and screening facility with a maximum potential production capacity of 250 TPH at various locations across Montana. The plant will run on electricity provided by a diesel engine/generator with a maximum rated design capacity of 1,000 hp. Conner may utilize two diesel engines/generators simultaneously; however, the combined maximum rated design capacity of the engines cannot exceed 1,000 hp. The proposed action is to issue MAQP #4362-00 allowing the construction and operation of the plant in Sweet Grass County, Montana, and other locations across the state.
- 3. *Objectives of Project*: The objective of the construction and operation of the rock crushing and screening facility is to produce business and revenue by selling aggregate to support construction projects. The issuance of MAQP #4362-00 would allow Conner to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
- 4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Conner has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP#4362-00.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
В	Water Quality, Quantity, and Distribution			X			Yes
С	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
Е	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
Н	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

There is a possibility that terrestrials would use the same area as the crushing and screening operation. Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the crushing and screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Storm water runoff from the crushing/screening operation may end up in an on-site pond which is used for the wash plant. This pond functions as a settling pond, although overflow may leave the property during high rain events and potentially impact downstream aquatic life. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see section 7.F). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water will be required for dust suppression on the surrounding roadways, at areas of operation, and pollution control for equipment operations. However, pollutant deposition and water use would cause minor impacts, if any, to water resources in these areas because the facility is small with seasonal and intermittent operations and only a small volume of water would be used. Overall, the equipment would have minor impacts to water quality, quantity, and distribution in the area of operations.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would have minor impacts on geology, soil quality, stability, and moisture of soils. Minor impacts from deposition of air pollutants on soils would result (as

described in Section 7.F of this EA) and minor amounts of water would be used for pollution control--only as necessary in controlling particulate emissions. Thus, minimal water runoff would occur. Since a small amount of pollution would be generated and corresponding emissions would be widely dispersed before settling upon vegetation and surrounding soils (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment and operation would be minor and short-term.

D. Vegetation Cover, Quantity, and Quality

The facility would be considered a minor source of emissions by industrial standards and would typically operate in remote areas previously designated and used for this type of operation. The overall footprint of the facility will be small, so the affect to quantity and quality of vegetative cover in the area would be minimal. There are no known plant species of concern within the project area.

In addition, water use at the facility, soil disturbance from water application, and the associated runoff would also be minimal. Overall, impacts to vegetation from the project would be minor.

E. Aesthetics

MAQP #4362-00 will include conditions to control emissions--including visible emissions from the operation. The crushing and screening operation would be portable, would operate on an intermittent and seasonal basis, and would be considered a small industrial source.

For the proposed project, the facility will be located in an existing gravel pit privately owned by the permittee and adjacent to railroad tracks. There are no houses around the pit area and the nearest house (approximately ¾ of a mile to the north of the proposed site) is shielded by sloped berm. Therefore, any disturbance to the aesthetic value of the area would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small and would operate on an intermittent basis. MAQP #4362-00 would include conditions limiting the facility's opacity and the facility's crushing and screening production. The permit will also limit total emissions from the crushing and screening facility and any additional equipment operated at the site to 250 tons per year or less, excluding fugitive emissions.

Further, the Department determined that the crushing and screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE was below the major source threshold level of 100 tons per year for any regulated pollutant. Additional pollutant deposition from the project would be minimal because the pollutants emitted would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area. Therefore, air quality impacts from the project in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed initial area of operation (Section 7, Township 1 North, Range 15 East in Sweet Grass County, Montana) contacted the Montana

Natural Heritage Program (MNHP). Search results concluded there are seven known vertebrate animal species of concern located within three miles of the facility. The search area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. The MNHP concluded that the endangered species of gray wolf and threatened species of bald eagle could be potentially located near the initial site location. The peregrine falcon, greater sage-grouse, Yellowstone cutthroat trout, and greater short-horned lizard were listed as sensitive species potentially occupying the same area as the proposed site location. The bobolink was also identified as a species of concern but has no federal agency status.

In the mid-to-late 1980s, in an effort to restore wolf populations, the gray wolf was reintroduced into three recovery areas – Northwestern Montana, Central Idaho, and the Greater Yellowstone. Although the initial project area is within the wolf recovery area, the wolf exhibits no particular habitat preference except wolves usually occupy areas with few roads and human disturbance, so it is unlikely that wolves would be impacted by this project.

The Bald Eagle is found primarily in forested areas along rivers and lakes--especially during breeding season. However, nesting site selection is dependent upon food availability and disturbance from human activity. The initial location for the crushing and screening facility would be located in an existing gravel pit near the Boulder and Yellowstone Rivers. To determine the impact on the local bald eagle population, the Department consulted the U.S. Department of Interior, Bureau of Reclamation Montana Bald Eagle Management Plan (MBEMP). With the identified nests being approximately 0.5 mile or more away from the proposed Conner facility, the site would fall into an MBEMP "Zone III" Classification, representing home range for bald eagles. Zone III is classified as the area from 0.5 mile to 2.5 miles in radius from the nest site (Zone II from 0.25 to 0.5 miles, Zone I from 0 to 0.25 miles). Zone III represents most of the home range used by eagles during nesting season, usually including all suitable foraging habitat within 2.5 miles of all nest sites in the breeding area that have been active within 5 years.

The objectives in Zone III areas include maintaining suitability of foraging habitat, minimizing disturbance within key areas, minimizing hazards, and maintaining the integrity of the breeding area. The nest locations would remain unchanged by the facility operation, except for a possible cumulative minor impact by air pollutants (by the facility as a whole), as described in Section 7.F of this EA. The proposed change would not impact the nest area except as described above from a possible impact from the slight increase in air pollutants. Therefore, the impact on bald eagles is expected to be minor. Conner has also stated that crushing operations are expected to be seasonal with the primary crushing season occurring from October to April which is not during the typical bald eagle nesting season.

The greater short-horned lizard could potentially be located within the operational area of the project due to its preferred habitat of sandy/gravelly soils, but any impacts to the species habitat would be minimal due to the small overall footprint and temporary portable nature of the facility.

Given the fact that most of the species of concern will not likely be located within the operational area of the project and the portable nature of the crushing and screening operationany effects would be minimal. In addition, initial and typical operations would take place within a previously disturbed industrial location further limiting the potential for impact to any unique endangered, fragile, or limited environmental resource in any proposed location of operation.

H. Demands on Environmental Resource of Water, Air and Energy

The proposed equipment would require an additional small quantity of water, air, and energy for the project. A minimal volume of water would be required for dust suppression of emissions being generated at the site. Impacts to air resources would be minor because the source is considered a minor industrial source of emissions, with intermittent and seasonal operations. Energy requirements would also be relatively small, as the facility would be powered by an industrial diesel engine generator. In addition, the permit requires restrictions on the generator's hours of operation to minimize the effects to air quality. Therefore, impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society, State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of construction and operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area. According to the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing and screening plant.

J. Cumulative and Secondary Impacts

The additional equipment would cause minor cumulative or secondary impacts to the physical and biological aspects of the human environment because the equipment would generate relatively small amounts of emissions of PM, PM₁₀, NO_x, CO, VOC (including HAPs), and SO_x. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because the crushing and screening plant would be relatively small, seasonal, and temporary. The proposed project would be short-term in nature, and have minor cumulative effects upon resources within the area. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
В	Cultural Uniqueness and Diversity				X		Yes
С	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
Е	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
Н	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not cause any disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions placed on MAQP #4362-00 that would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The facility is located on private land, the footprint of the project will be minor, and predominant use of the area would remain the same. The cultural uniqueness and diversity of this area would not be impacted by the proposed project because the facility would be a portable source, with seasonal and intermittent operations. Therefore, the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue because the proposed project would not require additional employees. In addition, only minor amounts of construction would be required to complete the project, and the facility would be a minor industrial source of emissions with seasonal and intermittent operations.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase aggregate production and air emissions slightly. The facility is located on private

land and the mining process is currently contained to 28 acres. Because minimal deposition of air pollutants would occur on the surrounding land (as described above in Section 7.F), only minor and temporary effects on the surrounding vegetation or agricultural production would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D above. According to the owner most of the surrounding area is farm land; therefore, impacts to the surroundings will be minor.

E. Human Health

Conditions would be incorporated into MAQP #4362-00 to ensure that the crushing and screening facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F of this EA, the air emissions from this project would be minimized by the use of water spray and other process limits that would be required of MAQP #4362-00. Further, the facility would operate on an intermittent and seasonal basis and only minor impacts would be expected on human health from the proposed facility.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities will not be limited by this facility. The project location for this action is near the Boulder and Yellowstone Rivers and adjacent to a railroad. All recreational opportunities, if available in the area, will still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, hours of operation, and rural location. The facility would operate on a seasonal and intermittent basis on private land and would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be minor.

G. Quantity and Distribution of Employment

The portable crushing and screening operation would be relatively small. As proposed, Conner will not employ any additional people so impacts to employment will be minimal. In addition, the project would have seasonal and intermittent operations. There would be no known effects upon the quantity and distribution of employment in this area.

H. Distribution of Population

The portable crushing and screening operation would be small with few (1-4) employees. No individuals would be relocated to the area of operation as a result of the project because Conner does not plan to hire additional employees as a result of this permitting action. Therefore, the facility would not impact the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

There would be no increase in traffic on existing roadways and highways in the area from the proposed project. Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor due to the relatively small size and seasonal nature of the crushing and screening facility.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would continue to be a small industrial source, portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

Conner would be allowed by MAQP #4362-00 to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An addendum would be required to operate in or within 10 kilometers (km) of a PM_{10} nonattainment area. MAQP #4362-00 would contain production and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility is small and portable, any impacts from the project would be minor and short-lived.

L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would continue to be portable, and the footprint of the facility would remain relatively small. Further, no other industrial operations are expected to result from this permitting action. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Conner, but any cumulative impacts or secondary impacts would be minor and short-term. In conclusion, the source is relatively small, the facility emissions will be minimal, and the project would have only minor cumulative and secondary impacts.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis:

The current permitting action is for the construction and operation of a portable rock crushing and screening facility. MAQP #4362-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program.

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Ed Warner Date: February 17, 2009